Zhenhua Sun

List of Publications by Year in descending order

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46 papers

3,574 citations

304368

22

h-index

288905 40 g-index

48 all docs 48 docs citations

48 times ranked

6639 citing authors

#	Article	IF	CITATIONS
1	Infrared Photodetectors Based on CVDâ€Grown Graphene and PbS Quantum Dots with Ultrahigh Responsivity. Advanced Materials, 2012, 24, 5878-5883.	11.1	698
2	Graphene and Graphene-like Two-Dimensional Materials in Photodetection: Mechanisms and Methodology. ACS Nano, 2014, 8, 4133-4156.	7.3	507
3	Real-Time Observation of Organic Cation Reorientation in Methylammonium Lead Iodide Perovskites. Journal of Physical Chemistry Letters, 2015, 6, 3663-3669.	2.1	322
4	The Application of Highly Doped Single-Layer Graphene as the Top Electrodes of Semitransparent Organic Solar Cells. ACS Nano, 2012, 6, 810-818.	7.3	297
5	A highly sensitive ultraviolet sensor based on a facile in situ solution-grown ZnO nanorod/graphene heterostructure. Nanoscale, 2011, 3, 258-264.	2.8	273
6	Solution Processable Lowâ€Voltage Organic Thin Film Transistors with Highâ€ <i>k</i> Relaxor Ferroelectric Polymer as Gate Insulator. Advanced Materials, 2012, 24, 88-93.	11.1	227
7	Thin Film Fieldâ€Effect Phototransistors from Bandgapâ€Tunable, Solutionâ€Processed, Fewâ€Layer Reduced Graphene Oxide Films. Advanced Materials, 2010, 22, 4872-4876.	11.1	209
8	Plasmonic-enhanced perovskite–graphene hybrid photodetectors. Nanoscale, 2016, 8, 7377-7383.	2.8	144
9	Regulating Infrared Photoresponses in Reduced Graphene Oxide Phototransistors by Defect and Atomic Structure Control. ACS Nano, 2013, 7, 6310-6320.	7.3	112
10	Environment-resisted flexible high performance triboelectric nanogenerators based on ultrafast self-healing non-drying conductive organohydrogel. Nano Energy, 2021, 82, 105724.	8.2	96
11	Enhanced photovoltaic performance of polymer solar cells by adding fullerene end-capped polyethylene glycol. Journal of Materials Chemistry, 2011, 21, 6848.	6.7	67
12	Enhancement of Hole Mobility of Poly(3â€hexylthiophene) Induced by Titania Nanorods in Composite Films. Advanced Materials, 2011, 23, 3648-3652.	11.1	64
13	Highly sensitive organic near-infrared phototransistors based on poly(3-hexylthiophene) and PbS quantum dots. Journal of Materials Chemistry, 2012, 22, 21673.	6.7	62
14	4D-printed self-recovered triboelectric nanogenerator for energy harvesting and self-powered sensor. Nano Energy, 2021, 84, 105873.	8.2	48
15	High optical switching speed and flexible electrochromic display based on WO ₃ nanoparticles with ZnO nanorod arrays' supported electrode. Nanotechnology, 2009, 20, 185304.	1.3	44
16	Reduced Carrier Recombination in PbS - CuInS2 Quantum Dot Solar Cells. Scientific Reports, 2015, 5, 10626.	1.6	44
17	Bidirectional Photoresponse in Perovskiteâ€ZnO Heterostructure for Fully Opticalâ€Controlled Artificial Synapse. Advanced Optical Materials, 2022, 10, .	3.6	30
18	Titanium dioxide sols synthesized by hydrothermal methods using tetrabutyl titanate as starting material and the application in dye sensitized solar cells. Electrochimica Acta, 2011, 56, 4308-4314.	2.6	25

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19	Enhanced electrochemical performance of the counterelectrode of dye sensitized solar cells by sandblasting. Electrochimica Acta, 2009, 54, 5320-5325.	2.6	24
20	A Tunneling Dielectric Layer Free Floating Gate Nonvolatile Memory Employing Typeâ€l Core–Shell Quantum Dots as Discrete Chargeâ€Trapping/Tunneling Centers. Small, 2019, 15, e1804156.	5.2	23
21	Optimization of a quasi-solid-state dye-sensitized solar cell employing a nanocrystal–polymer composite electrolyte modified with water and ethanol. Nanotechnology, 2009, 20, 105204.	1.3	22
22	n- and p-Type modulation of ZnO nanomesh coated graphene field effect transistors. Nanoscale, 2012, 4, 3118.	2.8	22
23	Solution processable high-performance infrared organic photodetector by iodine doping. RSC Advances, 2016, 6, 45166-45171.	1.7	22
24	A self-encapsulated broadband phototransistor based on a hybrid of graphene and black phosphorus nanosheets. Nanoscale Advances, 2020, 2, 1059-1065.	2.2	22
25	Trap-Assisted Charge Storage in Titania Nanocrystals toward Optoelectronic Nonvolatile Memory. Nano Letters, 2021, 21, 723-730.	4.5	20
26	Self-powered photodetectors based on CsxDMA1-xPbI3 perovskite films with high detectivity and stability. Nano Energy, 2020, 71, 104611.	8.2	17
27	Broadband White-Light Emission from Alumina Nitride Bulk Single Crystals. ACS Photonics, 2018, 5, 4009-4013.	3.2	16
28	The Physical Vapor Transport Method for Bulk AlN Crystal Growth. Molecules, 2019, 24, 1562.	1.7	16
29	Luminescence characterizations of freestanding bulk single crystalline aluminum nitride towards optoelectronic application. CrystEngComm, 2017, 19, 5522-5527.	1.3	14
30	SnSe2 Quantum Dots: Facile Fabrication and Application in Highly Responsive UV-Detectors. Nanomaterials, 2019, 9, 1324.	1.9	14
31	Nonlithographic Fabrication of Crystalline Silicon Nanodots on Graphene. Journal of Physical Chemistry C, 2012, 116, 532-537.	1.5	11
32	Defects induced broad spectral photoresponse of PVT-grown bulk AIN crystals. Scripta Materialia, 2018, 154, 45-48.	2.6	11
33	Ambipolar Charge Storage in Type†Core/Shell Semiconductor Quantum Dots toward Optoelectronic Transistorâ€Based Memories. Advanced Science, 2021, 8, e2100513.	5.6	9
34	The Application of a Highâ€P Polymer Dielectric in Graphene Transistors. Advanced Electronic Materials, 2020, 6, 2000031.	2.6	8
35	Thin film transistors integrating CsPbBr ₃ quantum dots for optoelectronic memory application. Journal Physics D: Applied Physics, 2021, 54, 114002.	1.3	8
36	Optically tunable split-ring resonators controlled lead sulfide quantum dots modulator for wide THz radiation. Nanophotonics, 2022, 11, 1619-1628.	2.9	8

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37	SnSe Nanosheets: From Facile Synthesis to Applications in Broadband Photodetections. Nanomaterials, 2021, 11, 49.	1.9	6
38	Simulation and Experiment for Growth of High-Quality and Large-Size AlN Seed Crystals by Spontaneous Nucleation. Sensors, 2020, 20, 3939.	2.1	5
39	Highly-Responsive Broadband Photodetector Based on Graphene-PTAA-SnS2 Hybrid. Nanomaterials, 2022, 12, 475.	1.9	4
40	Ultrafast infrared spectroscopy reveals intragap states in methylammonium lead iodide perovskite materials. Proceedings of SPIE, 2014, , .	0.8	3
41	Correction to Broadband White-Light Emission from Aluminum Nitride Bulk Single Crystals. ACS Photonics, 2018, 5, 5120-5120.	3.2	0
42	Correction to "Broadband White-Light Emission from Alumina Nitride Bulk Single Crystals― ACS Photonics, 2018, 5, 3864-3865.	3.2	0
43	First Principles Study on Li-doped and Li,O-codoped AlN. Medziagotyra, 2019, 25, .	0.1	0
44	Nucleation Control in Physical Vapor Transport Growth of AlN Single Crystals on Polycrystal Tungsten Substrates. Medziagotyra, 2020, 26, 139-142.	0.1	0
45	Revisiting the Polyol Synthesis and Plasmonic Properties of Silver Nanocubes. Current Chinese Science, 2020, 1, 132-140.	0.2	0
46	ZnSe/ZnS Core–Shell Quantum Dots Doped with Mn ²⁺ lons for Magnetic State-Manipulated Light Sources. ACS Applied Nano Materials, 2022, 5, 8448-8456.	2.4	O